

U.S.C. 103(a) as being unpatentable over the reference KR 8902848 in view of the reference of Rosenblatt.

In regards to claims 1-7, 11, and 13-20, claims 1-7 was previously cancelled and claims 11, and 13-20 was previously withdrawn from consideration per the Applicant's attorney's teleconference with the Office dated June 22, 2004. The Applicant hereby formally affirms the election to prosecute the invention of Group 1, claims 8-17, species of claim 12 per the Applicant's attorney's teleconference with the Office dated June 22, 2004.

#### **Objection to the Specification**

The disclosure of the present application stands objected to due to informalities. More specifically, the Office, page 4, lines 5-8 of the Office Action, stated that page 2, paragraph 1 should be changed from:

“This application is a division of pending application Serial Number 09/707,114, filed 11/05/2000 and claims ...”

to:

“This application is a division of pending application Serial Number 09/707,114, filed 11/05/2000, now Patent 6,652,871, and claims ...--.”

In view of the above, the Applicant has amended the disclosure of the present application per the Office's above suggestion. It is for the aforementioned that the Applicant respectfully request that the Office's objection to the disclosure be withdrawn.

**Rejection under the doctrine  
of obviousness-type double patenting**

Claims 8 and 9 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3, 5, 7, 8 of U.S. Patent No.

6,446,814. In rejecting claims 8 and 9, the Office stated:

“Although the conflicting claims are not identical, they are not patentably distinct from each other because Patent ‘814 discloses a method of making a filter comprising securing a silver chloride to a filter medium having a network (a web) using an adhesive.” (Emphasis added, see page 4, lines 25-28 of the Office Action.)

The Applicant respectfully disagrees with the Office’s above statement. Applicant’s claims 8 and 9 calls for a method of applying a water treatment composition to a web of material, including the steps of applying an adhesive to the web of material, securing a metal ion yielding material to the web of material, and applying an adhesive to the web of material. The ‘814 reference on the other hand teaches a method of making a dual filter from a filter medium having a network with openings therein. It is respectfully submitted that the web of material disclosed in Applicant’s claims 8 and 9 is different from the network of the filter medium claimed in claim 1 of the ‘814 reference. It is noted that the web of material of claims 8 and 9 can be formed into the network of filter medium of the ‘814 reference. However, the network of filter medium of the ‘814 reference does not necessarily cover the web of material of claims 8 and 9.

Claims 10 and 12 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3, 5, 7, 8 of U.S. patent No. 6,446,814 in view of the reference of Rosenblatt (U.S. Patent No. 6,365,169);

The Applicant disagrees with the above. In regards to independent method claim 10, it is noted that claim 10 calls for a method of making an article for insitu water treatment including the step of:

“... selecting an adhesive from the group consisting of polyurethane, epoxy resin, polyvinyl acetate and polyvinyl alcohol ...” (Emphasis added.)

The Patent ‘814 in view of the reference of Rosenblatt does not teach the above. In regards to Patent ‘814, the Office on page 5, lines 4-5 stated “Patent ‘814 fails to teach that the adhesive is polyvinyl acetate (PVA)(Claim 10) ...” The Applicant agrees with the aforementioned. In regards the reference of Rosenblatt, the Office on page 5, lines 6-7 stated:

“Rosenblatt teaches that PVA adhesives together with iodine and other antimicrobial components (See column 6, lines 36-44) can be used in making water filters ...”

The Applicant disagrees with the Office’s above statement. Applicant’s independent method claim 10 teaches the use of a PVA adhesive in making an article for insitu water treatment. It is noted that Rosenblatt teaches that adhesives can be made from a PVA resin (column 8, line 2) and that a PVA iodine complex can be used in making water filters (column 8, line 11). It is submitted however that Rosenblatt does not teach the use of an

adhesive formed from PVA without iodine in making an article for insitu water treatment as called for in Applicant's independent method claim 10.

In regards to claim 12, Applicant's dependent method claim 12 calls for the method of claim 10:

"... wherein the selected adhesive is sprayed on the solid structure and the selected water treatment material is applied to the adhesive on the structure."

It is submitted that Patent '814 in view of the reference of Rosenblatt does not teach the above. In regards to Patent '814, the Office on page 5, lines 4-5 stated:

"Patent '814 fails to teach that the adhesive is polyvinyl acetate (PVA)(Claim 10) and is applied by spraying (Claim 12)." (Emphasis added.)

The Applicant agrees with the above. In regards the reference of Rosenblatt, the Office however, on page 5, lines 6-7 stated:

"Rosenblatt teaches that PVA adhesives together with iodine and other antimicrobial components ... can be applied by spraying (See column 8, lines 1-11).

The Applicant disagrees with the Office's above statement. It is noted that although Rosenblatt teaches that a PVA resin mix/PVA iodine complex can be applied to a surface by spraying (column 6, lines 9-17), it is submitted that Rosenblatt does not teach the spraying of a PVA adhesive onto a solid structure as called for in Applicant's independent method claim 10.

It is for the above reasons that the Applicant respectfully submits that Applicant's method claims 10 and 12 are allowable over Patent '814 in view of the reference of Rosenblatt.

**Rejection under 35 U.S.C. 102(b) to KR 8902848**

Applicant's method claims 8 and 9 stand rejected under 35 U.S.C. 102(b) as being anticipated by the reference KR 8902848. The Applicant respectfully disagrees with the Office's aforementioned rejection of Applicant's method claims 8 and 9. However, to avoid any findings that claims 8 and 9 read on the reference KR 8902848, claims 8 and 9 have been amended.

In regards to independent method claim 8, Applicant's independent claim 8 calls for a method of applying a water treatment composition to an article including the step of:

“...applying a metal ion yielding material in particle form to the adhesive on the web ....” (Emphasis added.)

It is submitted that the reference KR 8902848 does not teach the above. More specifically, the KR 8902848 reference does not teach the applying of the metal ion yielding material in particle form to the adhesive. The reference KR 8902848, instead teaches:

“... filling between two ... permeable nonwoven fabrics (coated with adhesive on the inner side only) with silver-added active carbon ... and untreated active carbon by alternating the silver-added active carbon and untreated carbon in repetition; in repeating ...” (Emphasis added.)

It is submitted that the filling of silver-added active carbon and untreated active carbon between two permeable nonwoven fabrics is different from the Applicant's applying of the metal ion yielding material in particle form to the adhesive.

Note that although the reference KR 8902848 teaches in parentheses that the inner side of the nonwoven fabrics is coated with adhesive, the reference KR 8902848 does not teach that the silver-added active carbon and untreated active carbon are actually applied to the adhesive.

Note for example, the disclosure of the inner side of the nonwoven fabrics being coated with adhesive may be limited to just a portion of the inner side, namely the edges of the inner side, being coated with the adhesive so as to allow the two nonwoven fabrics to form a pocket therebetween. The filling of the silver-added active carbon and untreated active carbon between the two permeable nonwoven fabrics thus would not even involve the silver-added active carbon and untreated active carbon and the adhesive engaging each other.

The Applicant further submits that the reference KR 8902848 actually teaches away from the "applying a metal ion yielding material in particle form to the adhesive" of Applicant's method claim 8 through the disclosure "filling ... with silver-added active carbon ... and untreated active carbon by alternating the silver-added active carbon and untreated carbon in repetition; in repeating ..." (Emphasis added.) It is noted that the disclosure of the alternating filling of active and untreated carbons in repetition and in repeating supports

the position that the active carbons and untreated carbons of the reference KR 8902848 are not applied to the adhesive.

Applicant's independent claim 8 has also been amended to call for a method of applying a water treatment composition to an article including the step of:

"...allowing the adhesive to dry to secure the metal ion yielding material to the web of material ..."(Emphasis added.)

It is submitted that the reference KR 8902848 does not teach the securement of the silver-added active carbon and untreated carbon to the permeable nonwoven fabrics by allowing the adhesive to dry. The reference KR 8902848 instead teaches "... heat-sealing the nonwoven fabrics" to maintain the filled silver-added active carbon and untreated carbon between the two nonwoven fabrics.

It is submitted that the heat-sealing of the two nonwoven fabrics to maintain the filled silver-added active carbon and untreated carbon therebetween as taught in the reference KR 8902848 is different from the securement of the metal ion yielding material to the web of material by allowing an adhesive to dry as call for in Applicant's amended method claim 8 as heat-sealing the two nonwoven fabrics encases the carbons therebetween instead of securing the carbons thereto.

It is for the above reasons that the Applicant submits that Applicant's amended independent method claim 8 is allow is allowable over the reference KR 8902848.

**Rejection under 35 U.S.C. 103(a) to the  
combination of KR 8902848 and Rosenblatt**

Claims 10 and 12 stand rejected under 35 U.S.C. 103(a) as being unpatentable over the reference KR 8902848 in view of the reference of Rosenblatt.

In regards to independent method claim 10, Applicant's independent claim 10 calls for a method of making an article for insitu water treatment including the step of:

“... selecting an adhesive from the group consisting of polyurethane, epoxy resin, polyvinyl acetate and polyvinyl alcohol ...” (Emphasis added.)

It is submitted that the combination of KR 8902848 and Rosenblatt does not teach the above. In regards to the KR 8902848 reference, the Office on page 6, line 12 stated “KR 8902848 fails to teach that the adhesive is polyvinyl acetate (PVA)(Claim 10) ...” The Applicant agrees with the aforementioned.

In regards the reference of Rosenblatt, the Office however, on page 5, lines 6-7 stated:

“Rosenblatt teaches that PVA adhesives together with iodine and other antimicrobial components (See column 6, lines 36-44) can be used in making water filters ...”

The Applicant disagrees with the Office's above statement. As noted above, Applicant's independent method claim 10 teaches the use of a PVA adhesive in making an article for insitu water treatment. It is noted that although Rosenblatt teaches that adhesives can be made from a PVA resin (column 8, line 2) and that a PVA iodine complex can be used in making water filters (column 8, line 11), it is submitted that Rosenblatt does not teach the



use of a PVA adhesive in making an article for insitu water treatment as called for in Applicant's independent method claim 10.

Note that Applicant's independent method claim 10 specifically calls for the step of "... selecting an adhesive from the group consisting of polyurethane, epoxy resin, polyvinyl acetate and polyvinyl alcohol ..." It is submitted that Rosenblatt's disclosure of using a complex comprising PVA and iodine for making water filters is outside of the prescribed group of possible adhesive listed in independent method claim 10 for use in making the water treatment article.

Applicant's independent claim 10 also includes the steps of:

"... applying the adhesive to the water insoluble solid structure to form at least a partial coating thereon;  
applying the water treatment material to the adhesive on said solid structure;  
allowing the adhesive to set to thereby secure the water treatment material to the solid structure ..."

It is submitted that the combination of KR 8902848 and Rosenblatt does not teach the above as neither KR 8902848 nor Rosenblatt teaches the step of allowing an adhesive to set to secure a water treatment material to a solid structure.

Applicant's independent claim 10 further includes the steps of:

"... forming the structure into an article for placement into a body of water to thereby enable the structure to adhesively support the water treatment material thereon in a condition that maintains a water concentration of metal ions less than 1000 parts per billion (ppb)." (Emphasis added.)

It is submitted that the combination of KR 8902848 and Rosenblatt does not teach the above as neither KR 8902848 nor Rosenblatt teaches the step of forming a structure that can adhesively support a water treatment material thereon in a condition that maintains a water concentration of metal ions less than 1000 parts per billion (ppb).

It is for the above reasons that the Applicant respectfully submits that Applicant's independent claim 10 is allowable over the reference KR 8902848 in view of the reference of Rosenblatt.

In regards to claim 12, Applicant's dependent method claim 12 calls for the method of claim 10:

"... wherein the selected adhesive is sprayed on the solid structure and the selected water treatment material is applied to the adhesive on the structure."

It is submitted that the combination of KR 8902848 and Rosenblatt does not teach the above. In regards to the KR 8902848 reference, the Office on page 6, lines 12-13 stated:

"KR 8902848 fails to teach that the adhesive is polyvinyl acetate (PVA)(Claim 10) and is applied by spraying (Claim 12)." (Emphasis added.)

The Applicant agrees with the above. In regards the reference of Rosenblatt, the Office however, on page 5, lines 6-7 stated:

"Rosenblatt teaches that PVA adhesives together with iodine and other antimicrobial components ... can b applied by spraying (See column 8, lines 1-11).

The Applicant respectfully disagrees with the Office's above statement. It is noted that although Rosenblatt teaches that a PVA resin mix/PVA iodine complex can be applied to a surface by spraying (column 6, lines 9-17), it is submitted that Rosenblatt does not teach the spraying of a PVA adhesive onto a solid structure as called for in Applicant's independent method claim 10.

It is for the above reasons that the Applicant respectfully submits that Applicant's dependent method claim 12 is allowable over the reference KR 8902848 in view of the reference of Rosenblatt. In further regards to Applicant's claims 9 and 12, Applicant's dependent claim 9 depends on Applicant's amended independent claim 8 and Applicant's dependent claim 12 depends on Applicant's independent claim 10. Since Applicant's amended independent claim 8 and Applicant's independent claim 10 are allowable for the reasons given above, Applicant's dependent claims 9 and 12 should also be allowable.

In view of the above, it is submitted that the application is in condition for allowance. Allowance of claims 8-10 and 12, as amended, is respectfully requested. Applicant has enclosed a version of the amendment showing changes made with this response.

It is noted that a response to the Office Action for the present case was due on September 30, 2004. In view of the view of the aforementioned, Applicant has also enclosed a petition for a one (1) month time extension along with a credit card authorization form in

payment of the one (1) month time extension with this response. Please charge any deficiencies in fees to deposit account 10-0210.